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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/684,688	10/15/2003	Atsuki Kasashima	Q77964	3405

23373 7590 01/17/2007
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EXAMINER	
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ART UNIT	PAPER NUMBER
3711	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
2 MONTHS	01/17/2007	PAPER

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BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Application Number: 10/684,688
Filing Date: October 15, 2003
Appellant(s): KASASHIMA, ATSUKI

MAILED
JAN 17 2007
Group 3700

David Emory
Sughrue, Mion, PLLC
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 12/12/06 appealing from the Office action mailed 4/05/06.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

6884183	Sullivan	4-2005
5566943	Boehm	10-1996

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-4, 6-8, 11, 12, 14, and 17-19 are rejected under 35 U.S.C. 102(e) as being anticipated by Sullivan (USPN 6884183).

Regarding claim 1, Sullivan discloses a golf ball having an outermost spherical surface wherein a plurality of flat surface regions are formed on the outermost spherical surface, where areas of said outermost spherical surface which are not formed of the flat regions are land areas on the outermost surface and a dimple is disposed within the plurality of flat surface regions (See Entire document).

Regarding claim 2, Sullivan discloses the flat surface regions being polygonal.

Regarding claim 3, Sullivan discloses a dimple disposed within each of the polygonal plane regions.

Regarding claim 4, Sullivan discloses the dimple being centered within each polygonal plane region.

Regarding claim 6, Sullivan discloses the total area of land areas on the spherical surface accounts for less than 20% of the entire golf ball surface area (See Column 7, lines 27 through 37).

Regarding claim 7, Sullivan discloses an annular plane region formed between ridge-lines delimiting the flat surface and the dimples (See Figure 4).

Regarding claim 8, Sullivan discloses some of the flat surface regions devoided of dimples on the spherical surface of the ball (See Figures 3A-5).

Regarding claim 11, Sullivan discloses the dimple having a circular shape as view in plane.

Regarding claim 12, Sullivan shows in Figure 4 that ridge-lines having substantially no width.

Regarding claim 14, Sullivan discloses a golf ball having an outermost spherical surface wherein a plurality of flat surface regions which comprises hexagonal plane regions and pentagonal plane regions are formed on the outermost spherical surface and a simple is disposed within the plurality of the flat surface regions wherein pentagonal units which are each formed by disposing five hexagonal plane regions closely about one pentagonal plane region are arranged on the spherical surface (See Figure 3A).

Regarding claim 17, Sullivan discloses a golf ball having an outermost spherical surface wherein a plurality of flat surface regions which comprises hexagonal plane regions and pentagonal plane regions are formed on the outermost spherical surface and a simple disposed within the plurality of flat surface regions wherein hexagonal units which are each formed by disposing six hexagonal plane regions closely about one hexagonal plane region are arranged on the spherical surface of the ball (See Figure 3A).

Regarding claim 18, Sullivan discloses hexagonal plane regions closely disposed over a spherical surface area of the golf ball excluding the pentagonal units (See Figure 3A).

Regarding claim 19, Sullivan discloses the dimples formed with a side and a bottom which both are contoured by curves protruding inward.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 5, 9, 10, and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sullivan (USPN 6884183).

Regarding claim 5, Sullivan does not disclose the number of dimples on the golf ball of the invention being claimed. Though Sullivan notes that a conventional golf ball has 300 to 500 dimples thereon. One having ordinary skill in the art would have found it obvious to have 300 to 500 dimples on a golf ball because it is a typical value known in the art for reducing the land area on the outermost surface of a golf ball.

Regarding claims 9, 10, and 13, Sullivan discloses a golf ball having an outermost spherical surface wherein a plurality of flat surface regions and areas except the flat surface regions thereon are left as lands and a dimple is disposed within the plurality of flat surface regions Sullivan discloses the spacing between the flat plane regions may be of any number of patterns such as tetrahedron, octahedron, dodecahedron, etc. One having ordinary skill in the art would have found it obvious to have the flat plane surface regions of any shape being delimited by ridge-lines, as taught by Sullivan, in order to optimize the flight performance of the golf ball. Furthermore, depending on the pattern, one having ordinary skill in the art would have found it obvious to have the apex of any number of ridge lines serve as a boundary between two adjacent regions positioned radially farthest from the center of the golf ball, in order to optimize the flight performance.

Claims 20 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sullivan (USPN 6884183) in view of Boehm (USPN 5566943).

Regarding claims 20 and 21, Sullivan does not disclose the dimple having a bottom parallel (concentric) to the surface region. Boehm discloses a golf ball having a constant depth wherein the bottom of the dimple is parallel to the surface of the golf balls (See Entire Document). The constant depth improves the contact of the golf ball with the golf club. One having ordinary skill in the art would have found it obvious to have the bottom of the dimple parallel to the surface region, as taught by Boehm, in order to improve the contact between the ball and golf club.

(10) Response to Argument

The appellant argues that there is mo support within Sullivan of the golf ball being milled or having flat regions. The examiner disagrees for the following reason. With respect to the golf ball being milled, this is referring to a product-by-process (MPEP 2113). The flat regions can be made unitary with the dimple via mold or made through other processes. With respect to Sullivan not providing support for the flat regions, Sullivan does indeed provide support. In the advisory action, the inter-sectional spacing 22 was thought to be referencing the spacing between the inter dimple and the boundary of the polygon. With this clarified, Sullivan notes within the prior art and background of the invention that it is known to having polygonal shapes on the golf ball to serve as dimples. With that said, Sullivan creates dimples inside of the polygonal shapes, wherein the contour lines of the dimples inside of the polygonal shapes would indicate that the polygonal shape is planar. Further, as noted in the advisory action dated 7/31/06, the tangent line drawn with respect to the plane of the polygonal shape and the dimple would indicate that the polygonal shape is planar also. All claims argued by the appellant within the instant application are geared to Sullivan not having support for having flat region; therefore, the above arguments should also be considered regarding the additional claims.

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

Alvin A. Hunter, Jr.

Conferees:

EUGENE KIM
SUPERVISORY PATENT EXAMINER